

Amendment

U.S. Patent Application No. 09/475,385

Please add the following new claims:

C3 --38. The method of claim 18, wherein said organic group is substituted with the functional group having the formula R, OR, COR, COOR, OCOR, a carboxylate salt, halogen, CN, NR₂, SO₃H, a sulfonate salt, /OSO₃H, a OSO₃⁻ salt, NR(COR), CONR₂, NO₂, PO₃H₂, a phosphonate salt, a phosphate salt, N=NR, NR₃⁺X⁻, PR₃⁺X⁻, S_kR, SSO₃H, a SSO₃⁻ salt, SO₂NRR', SO₂SR, SNRR', SNQ, SO₂NQ, CO₂NQ, S-(1,4-piperazinediyl)-SR, 2-(1,3-dithianyl) 2-(1,3-dithiolanyl), SOR, or SO₂R, wherein R and R', which are the same or different, are independently hydrogen, branched or unbranched C₁-C₂₀ substituted or unsubstituted, saturated or unsaturated hydrocarbon, k is an integer ranging from 1-8, anion X⁻ is a halide or an anion derived from a mineral or organic acid, Q is (CH₂)_w, (CH₂)_xO(CH₂)_z, (CH₂)_xNR(CH₂)_z, or (CH₂)_xS(CH₂)_z, where w is an integer from 2 to 6 and x and z are integers from 1 to 6.

Sub. E3 39. The method of claim 38, wherein said hydrocarbon is alkyl, alkenyl, alkynyl, substituted or unsubstituted aryl, substituted or unsubstituted heteroaryl, substituted or unsubstituted alkylaryl, or substituted or unsubstituted arylalkyl.

40. The method of claim 18, wherein said organic group is an aromatic group of the formula A_yAr- wherein Ar is an aromatic radical and A is a substituent on the aromatic radical.

3 41. The method of claim ²40, wherein the substituent A is a linear, branched, or cyclic hydrocarbon radical.

4 42. The method of claim ²40, wherein the substituent A is a linear, branched, or cyclic hydrocarbon containing 1 to 20 carbon atoms.

5 43. The method of claim ²40, wherein said Ar is phenyl, naphthyl, anthracenyl, phenanthrenyl, biphenyl, pyridinyl, benzothiadiazolyl, or benzothiazolyl.

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~~64~~ 44. The method of claim ~~40~~⁷, wherein the substituent A is a linear, branched, or cyclic hydrocarbon containing 1 to 20 carbon atoms and Ar is phenyl, naphthyl, anthracenyl, phenanthrenyl, biphenyl, pyridinyl, benzothiadiazolyl, or benzothiazolyl.

Sub. K4
C3
cont.
45. The method of claim 18, wherein said organic group is a C₁-C₁₂ alkyl group having at least one acidic group having a pKa of less than 11 or at least one salt of an acidic group having a pKa of less than 11, or a mixture thereof.

46. The method of claim 18, wherein there is more than one type of organic group attached to said carbonaceous material.

47. The method of claim 18, wherein some of the carbonaceous material has been modified with one organic group and another portion of the carbonaceous material has been modified with a different organic group.

48. The method of claim 38, wherein there is more than one type of organic group attached to said carbonaceous material.

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~~49~~ 49. The method of claim ~~40~~³, wherein some of the carbonaceous material has been modified with one organic group and another portion of the carbonaceous material has been modified with a different organic group.--

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